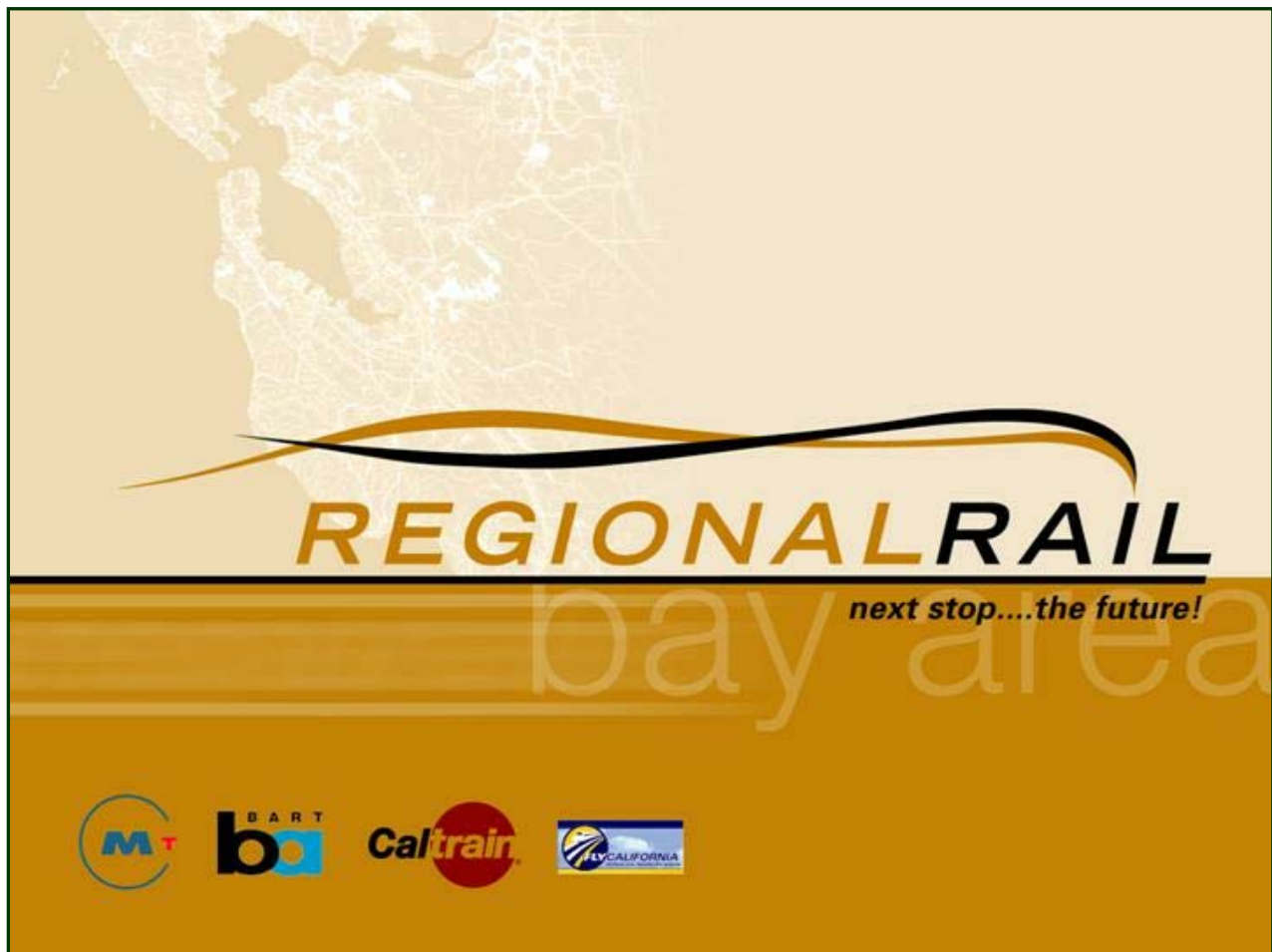


# BAY AREA REGIONAL RAIL PLAN

## Technical Memorandum 4a Conditions, Configuration & Traffic on Existing System



November 15, 2006

## INTRODUCTION

The purpose of this memorandum is to develop a database that describes the condition, configuration and traffic on the existing freight and commuter rail system in the region. The region is bounded by Cloverdale in Sonoma County, Auburn in Placer County, Merced in Merced County and Salinas in Monterey County. To accomplish this task the rail system has been broken down into the following 19 segments and sub-segments to portray the different operating parameters of each segment. The segments are shown on the "Existing Regional Rail Network" map on page 2.

In assessing this information the reader should remember that railroad freight traffic has both weekly and seasonal fluctuations. Weekly cycles are driven by origin point and day of the week. Freight traffic tends to be at its lowest point on Sunday and Monday and rise to its peak later in the week. Another factor in the San Francisco Bay area is the fluctuation in vessel arrivals and the variability of Port operations. Seasonal peaks also exist with the current high traffic months being March, April and August through October.

Freight railroad traffic is subject to alternate routing even over relatively short segments. As an example, container traffic departing the Port of Oakland destined for Chicago can be routed via the Martinez Subdivision or the Niles and Coast subdivisions. The Union Pacific (UP) changes its routing preferences frequently. Another factor which can lead to changes in freight traffic routings and volumes are joint facility agreements. The UP recently granted the Burlington Northern Santa Fe (BNSF) limited joint facility rights over the UP's Fresno and Martinez subdivisions. BNSF is permitted to operate up to eight trains per day between the Port of Oakland and Bakersfield. This raised the traffic levels on the Fresno and Martinez subdivisions and lowered freight traffic on the BNSF's Stockton and Bakersfield subdivisions.

U.S. freight railroads do not have to file an Environmental Impact Report (EIR) to change traffic routing patterns. The granting of trackage rights is a private matter between railroads. Railroads may also alter traffic routing patterns to facilitate performance of maintenance operation. For these reasons freight traffic is presented as a range.

In describing the level of passenger traffic weekday traffic levels have been used. The existing Northern California passenger rail network is as follows:

The Amtrak Coast Starlight: This long distance train originates in Seattle, runs through Portland and operates in Northern California along UP tracks between Sacramento and Oakland, Martinez Subdivision and continuing to Los Angeles, Coast subdivision.

The Amtrak California Zephyr: Originates in Chicago, runs through Denver and operates along UP tracks between Reno, Truckee, Sacramento, and Emeryville, Martinez subdivision.

The San Joaquin: Operates along UP tracks, Fresno Subdivision, from Sacramento to Stockton and along BNSF and UP tracks from Oakland to Stockton, continuing to Bakersfield along the BNSF.

The Capitol Corridor: Operates along UP tracks between Auburn, Sacramento, Oakland along the Martinez subdivision and to Santa Clara along the Niles and Coast subdivision and along PCJPB owned tracks between Santa Clara and the Diridon Station in San Jose.

Caltrain Commuter Rail Service: Operates along PCJPB owned tracks between San Francisco and San Jose and along UP tracks from San Jose to Gilroy.

Altamont Commuter Rail Service: Operates along UP, Oakland and Coast subdivision owned tracks from Stockton to Santa Clara and along PCJPB owned tracks from Santa Clara to San Jose.



**Existing Regional Rail Network**

## **Segments**

1. **SMART Corridor** (page 5)
  - a) Cloverdale to Ignacio
  - b) Ignacio to Larkspur
2. **Ignacio to Fairfield/Suisun** (page 7)
  - a) Ignacio to Napa River
  - b) Napa River to Fairfield/Suisun
3. **Calistoga to Vallejo** (page 9)
  - a) Calistoga to Krug
  - b) Krug to Napa
  - c) Napa to Vallejo
4. **Sacramento to Oakland** (page 11)
  - a) Sacramento to Martinez
  - b) Martinez to Oakland
5. **Auburn to Sacramento** (page 13)
6. **Stockton to Oakland** (page 14)
  - a) Stockton to Port Chicago (BNSF)
  - b) Port Chicago to Stege (BNSF)
  - c) Port Chicago to Martinez (UP)
  - d) Martinez to Oakland (see 4b)
7. **Lathrop to Martinez** (page 17)
  - a) Lathrop to Tracy
  - b) Tracy to Antioch
  - c) Antioch to Port Chicago
  - d) Port Chicago to Martinez (see 6c)
8. **Sacramento to Merced** (page 20)
  - a) Sacramento to Stockton (UP Sacramento Subdivision)
  - b) Sacramento to Stockton (UP Fresno Subdivision)
  - c) Sacramento (Polk) to Stockton
  - d) Stockton to Merced (UP Fresno Subdivision)
  - e) Stockton to Merced (BNSF)
9. **Tracy to Los Banos** (page 24)
10. **Niles Jct. to Stockton** (page 25)
  - a) Niles Jct. to Stockton - ACE Corridor (UP Oakland Subdivision)
  - b) Niles Jct. to Tracy (Old SP Altamont Pass Line)



**11. Oakland to San Jose** *(page 27)*

- a) UP Coast Subdivision
  - i) Elmhurst to Newark
  - ii) Newark to Santa Clara
  - iii) Santa Clara to Diridon
- b) UP Niles Subdivision
  - i) West Oakland to Jack London Square Station
  - ii) Jack London Square Station to Elmhurst
  - iii) Elmhurst to Niles Jct.
  - iv) Niles Jct. to Newark (Centerville Line)
- c) UP Oakland Subdivision
  - i) Melrose to Union City
  - ii) Union City to Niles Jct.
- d) Warm Springs Subdivision
  - i) Niles Jct. to Milpitas
  - ii) Milpitas to San Jose
- e) UP San Jose Branch
  - i) Niles Jct. to Paseo Padre Blvd.
  - ii) Paseo Padre Blvd. to San Jose

**12. San Francisco to San Jose** *(page 35)*

**13. Redwood Jct. to Newark** *(page 36)*

**14. San Jose to Salinas** *(page 37)*

- a) San Jose to Gilroy
- b) Gilroy to Salinas

**15. Iron Horse Trail** *(page 39)*

**16. Santa Cruz to Watsonville Jct.** *(page 40)*

**17. Castroville to Monterey** *(page 41)*

**18. Carnadero to Hollister** *(page 42)*

**19. Old Sacramento Northern Corridor** *(page 43)*

- a) West Sacramento to Riverview
- b) Riverview to Dozier
- c) Dozier to Montezuma
- d) Montezuma to Chipps

## **1. SMART Corridor**

The Sonoma-Marine Transit (SMART) Corridor consists of the old Northwestern Pacific (NWP) line between Cloverdale and Larkspur.



### **1a. Cloverdale to Ignacio**

#### **General Conditions:**

- Class of tracks – Federal Railway Administration (FRA) class 1 and FRA excepted.  
Line is presently out of service.
- Speed – 10 MPH.
- Signal system – None except to protect drawbridge at Petaluma Creek. Plus crossing warning systems.
- General condition of railway – Out of Service.
- Number of tracks – One main track.
- Passing sidings, number and length – Minimal passing sidings.

#### **Configuration:**

- General description of surrounding land use – Suburban to rural with small cities.
- Width of Right-of-Way (ROW) – 100 feet.
- Approx. length – 60 miles.
- Utilities – No known longitudinal utilities. Various overhead and underground utility crossings.

#### **Ownership:**

- ROW ownership – Mostly SMART with portions of mixed ownership between: Golden Gate Bridge, Highway & Transportation District (GGBHTD), SMART, North Coast Rail Authority (NCRA).
- Trackage rights – NCRA holds freight franchise.
- Passenger rights – SMART.

#### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – None.
- Switching and yard operations – None.

#### **Capacity Potential:**

- Could be upgraded to FRA class 3 or 4.
- Second track potential except at tunnels and bridges.

#### **Capacity Expansion Challenges:**

- Width restrictions at tunnels and bridges.
- Rail line has been out of service since 1998.
- Major areas of unstable subgrade.

## **1b. Ignacio to Larkspur**

### **General Conditions:**

- Class of tracks – FRA class 1 and FRA excepted.
- Speed – 10 MPH.
- Signal system – None. (Except crossing warning systems.)
- General condition of railway – Out of Service.
- Number of tracks – One main track.
- Passing sidings, number and length – None.

### **Configuration:**

- General description of surrounding land use – Suburban.
- Width of ROW – 100 feet. Less in some areas.
- Approx. length – 9 miles.
- Utilities – No known longitudinal utilities. Various overhead and underground utility crossings.

### **Ownership:**

- ROW ownership – SMART.
- Trackage rights – None.
- Passenger rights – SMART.

### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – None.
- Switching and yard operations – None.

### **Capacity Potential:**

- FRA class 3.
- Second track with local restrictions at tunnels and bridges.

### **Capacity Expansion Challenges:**

- Bridges and tunnels.
- Narrow ROW through San Rafael.

## **2. Ignacio to Fairfield/Suisun**

Ignacio to Fairfield/Suisun connecting link between old NWP and UP Martinez subdivision.



### **2a. Ignacio to Napa River**

#### **General Conditions:**

- Class of tracks – FRA class 1 or excepted.
- Speed – 10 MPH.
- Signal system – Only on Black Point and Brazos Bridges. (Plus inactive crossing warning systems).
- General condition of railway – Out of Service.
- Number of tracks – One main track.
- Passing sidings, number and length – No passing sidings except yard at Schellville.

#### **Configuration:**

- General description of surrounding land use – Rural.
- Width of ROW – 100 feet.
- Approx. length – 23 miles.
- Utilities – No known longitudinal utilities.
- Various overhead and underground utility crossings.

#### **Ownership:**

- ROW ownership – NCRA.
- Trackage rights – None.
- Passenger rights – None.

#### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – None.
- Switching and yard operations – Old interchange yard at Schellville Yard at Lombard just beyond East end of segment.

#### **Capacity Potential:**

- Second main track potential except at bridges.

#### **Capacity Expansion Challenges:**

- Railroad subject to flooding and washouts during high tides and heavy run off periods.



## **2b. Napa River to Fairfield/Suisun**

### **General Conditions:**

- Class of tracks – FRA class 2.
- Speed – up to 25 MPH.
- Signal system – None.
- General condition of railway – Good.
- Number of tracks – One.
- Passing sidings, number and length – yard tracks at Lombard, Napa Jct. and Busch.

### **Configuration:**

- General description of surrounding land use – Rural.
- Width of ROW – 100 feet.
- Approx. length – 16 miles
- Utilities - No known longitudinal utilities. Various overhead and underground utility crossings.

### **Ownership:**

- ROW ownership – UP- Leased to California Northern.
- Trackage rights – None.
- Passenger rights – Held by UP.

### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – 3 to 5.
- Switching and yard operations:
  - Extensive switching at Lombard, Napa Jct., Cordelia and Busch.
  - Mainline frequently used for switching and interchange to/from UP.

### **Capacity Potential:**

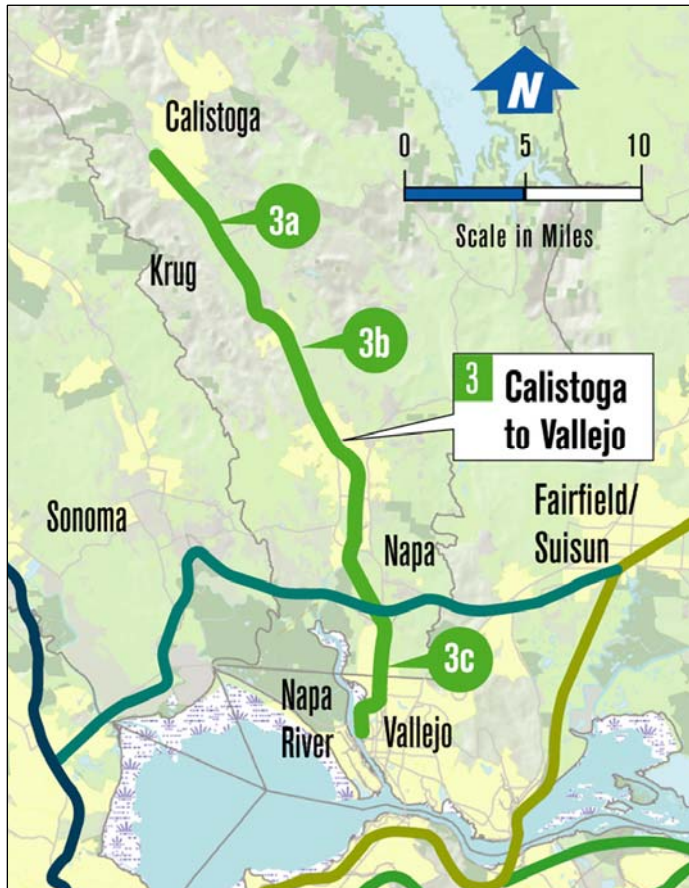
- Two main tracks.

### **Capacity Expansion Challenges:**

- Extensive mainline occupancy for switching and interchange.
- Wetlands limit expansion at Suisun.

### **3. Calistoga to Vallejo**

The old SP Napa Branch of which the Northern portion is abandoned, mid-portion now owned by Napa Valley Wine Train (NVWT), and southern portion owned by UP and leased to California Northern.



#### **3a. Calistoga to Krug**

##### **General Conditions:**

- Class of tracks – None.
- Speed – Not applicable (N/A).
- Signal system – N/A.
- General condition of railway – Railroad abandoned.
- Number of tracks – All tracks are removed.
- Passing sidings, number and length – None.

##### **Configuration:**

- General description of surrounding land use – Rural.
- Width of ROW – Less than 100 feet; not continuous.
- Approx. length – 7 miles.
- Utilities – No known longitudinal utilities. Various overhead and underground utility crossings.

##### **Ownership:**

- ROW ownership – Unknown.
- Trackage rights – None.
- Passenger rights – None.

##### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – None.
- Switching / yard operations – None.

##### **Capacity Potential:**

- Two main tracks.

##### **Capacity Expansion Challenges:**

- Ownership questionable.
- Slow, not continuous.

#### **3b. Krug to Napa**

##### **General Conditions:**

- Class of tracks – FRA Class 1.
- Speed – 10 to 15 MPH.
- Signal system – None.
- General condition of railway – Poor.
- Number of tracks – One.
- Passing sidings, number and length – Short run around track at St. Helena.

**Configuration:**

- General description of surrounding land use –Suburban/Rural.
- Width of ROW – Less than 100 feet.
- Approx. length – 22 miles.
- Utilities - No known longitudinal utilities. Various overhead and underground utility crossings.

**Ownership:**

- ROW ownership – NVWT.
- Trackage rights – None.
- Passenger rights – NVWT. Dinner train operation.

**Traffic:**

- Average daily passenger trains – 4 to 6.
- Average daily freight trains – None.
- Switching and yard operations – NVWT does some local switching in Napa.

**Capacity Potential:**

- Could add some second track.

**Capacity Expansion Challenges:**

- Many at-grade crossings to access wineries and vineyards.

### **3c. Napa to Vallejo**

**General Conditions:**

- Class of tracks – FRA class 1.
- Speed – 10 MPH.
- Signal system – None.
- General condition of railway – Fair.
- Number of tracks – One.
- Passing sidings, number and length – None, only yard trackage.

**Configuration:**

- General description of surrounding land use – Suburban.
- Width of ROW – Less than 100 feet.
- Approx. length – 13 miles..
- Utilities - No known longitudinal utilities. Various overhead and underground utility crossings.

**Ownership:**

- ROW ownership – UP. Leased to California Northern.
- Trackage rights – None.
- Passenger rights – Held by UP.

**Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – 2 to 4.
- Switching and yard operations – Frequent blockage of main tracks.

**Capacity Potential:**

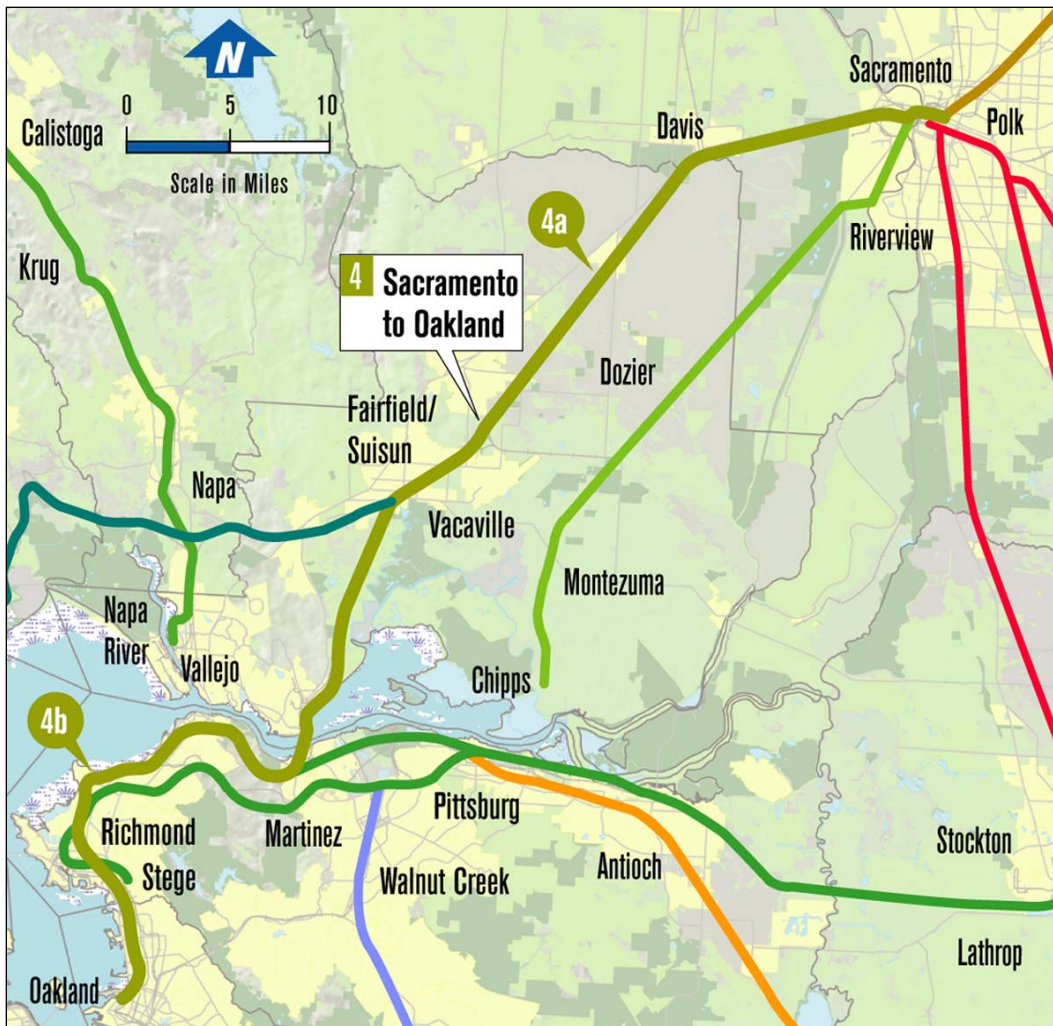
- Single track with passing sidings.

**Capacity Expansion Challenges:**

- Narrow ROW.
- Industrial switching.
- Multiple road crossings.

## **4. Sacramento to Oakland**

UP's Martinez subdivision and route of the Capitol Corridor service.



### **4a. Sacramento to Martinez**

#### **General Conditions:**

- Class of tracks – FRA class 5.
- Speed – 79 MPH passenger / 70 MPH freight.
- Signal system – Two main tracks (2MT); Centralized Traffic Control (CTC).
- General condition of railway – 131-136 pound Continuous Welded Rail (CWR). Excellent tie and surface conditions.
- Number of tracks – Two main tracks.
- Passing sidings, number and length – N/A.

#### **Configuration:**

- General description of surrounding land use – Expanding suburban, rural and extensive industry.
- Width of ROW – 100 feet.
- Approx. length – 56 miles.
- Utilities – fiber optics and pipelines in ROW. Various overhead and underground in utility crossings.



**Ownership:**

- ROW ownership – UP.
- Trackage rights – Burlington Northern Santa Fe (BNSF).
- Passenger rights – Amtrak, Capitol Corridor.

**Traffic:**

- Average daily passenger trains – 36.
- Average daily freight trains –
  - UP: 30 to 45
  - BNSF: 4 to 6.
- Switching and yard operations – Davis, Fairfield/Suisun, Benicia, Martinez (Ozol Yard)

**Capacity Potential:**

- 3 or 4 tracks possible for most of corridor.

**Capacity Expansion Challenges:**

- Wetlands, extensive industry in Benicia, Benicia Bridge and viaduct, Yolo causeway, I street bridge in Sacramento etc.

## **4b. Martinez to Oakland**

**General Conditions:**

- Class of tracks – FRA class 5.
- Speed – 79 MPH passenger / 70 MPH freight (43 MPH passenger/30 MPH freight along San Pablo Bay).
- Signal system – CTC.
- General condition of railway – Good 131-136 pound CWR.
- Number of tracks – Two main tracks.
- Passing sidings, number and length – At Yards.

**Configuration:**

- General description of surrounding land use – Urban, Suburban and Industrial
- Width of ROW – 100 feet.
- Approx. length – 30 miles.
- Utilities – Underground pipelines and fiber optics in ROW.

**Ownership:**

- ROW ownership – UP.
- Trackage rights – BNSF, Richmond Pacific-Stege to San Pablo.
- Passenger rights – Amtrak, Capitol Corridor, San Joaquin.

**Traffic:**

- Average daily passenger trains – 44:
  - Amtrak: 4
  - San Joaquin Route: 8
  - Capitol Corridor: 32
- Average daily freight trains:
  - UP: 50
  - BNSF: 6 to 8
- Switching and yard operations – Martinez, Ozol, Crocket, Richmond, Oakland.

**Capacity Potential:**

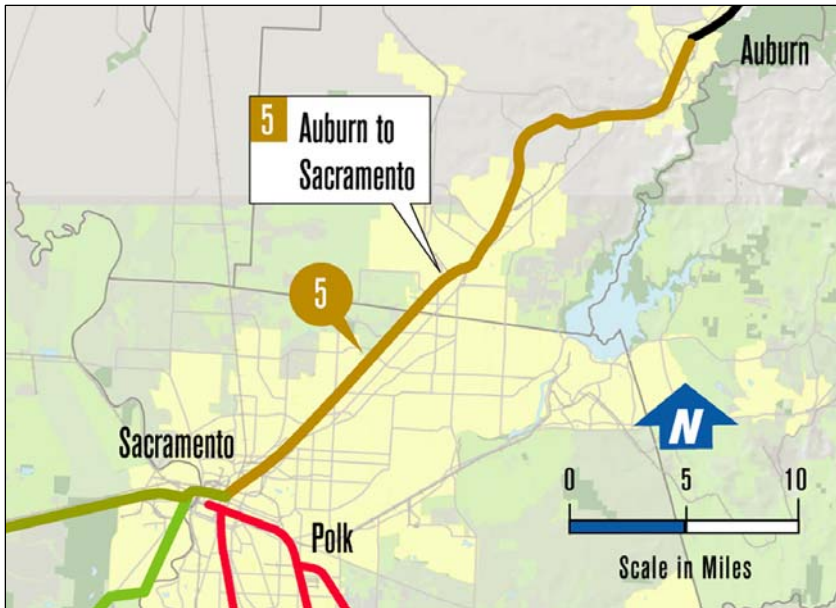
- Third main track possible except in industrial areas.

**Capacity Expansion Challenges:**

- Extensive switching and yard operations, wetlands and narrow curves along the bay.

## **5. Auburn to Sacramento**

A portion of UP's Roseville subdivision - the old Southern Pacific's (SP) Donner Pass Line.



### **General Conditions:**

- Class of tracks – FRA class 4.
- Speed:
  - Auburn to Roseville: 50 MPH passenger / 40 MPH freight
  - Roseville to Sacramento: 79 MPH passenger / 70 MPH freight.
- Signal system – CTC.
- General condition of railway – Good 131-136 pound CWR.
- Number of tracks – Two main tracks.
- Passing sidings, number and length – None.

### **Configuration:**

- General description of surrounding land use –Suburban and rural.
- Width of ROW – 100 feet.
- Approx. length – 18 miles.
- Utilities – pipelines and fiber optics in ROW.

### **Ownership:**

- ROW ownership – UP.
- Trackage rights – BNSF.
- Passenger rights – Amtrak, Capitol Corridor.

### **Traffic:**

- Average daily passenger trains:
  - 6 Sacramento to Roseville.
  - 4 Roseville to Auburn.
- Average daily freight trains – 12 to 16.
- Switching and yard operations – Extensive. Roseville is a major freight car processing point.

### **Capacity Potential:**

- 3 or 4 tracks for most of the corridor.

### **Capacity Expansion Challenges:**

- High fill through Sacramento.
- Restrictions at Roseville yard, bridges and tunnels.
- Tunnels east of Rocklin to Auburn-Bowman.

## **6. Stockton to Oakland**

The Amtrak California San Joaquin service, which also operates over a portion of the UP's Martinez Subdivision, sharing this route with the Capitol Corridor Joint Powers Authority's (CCJPA) Capitol Corridor service.



### **6a. Stockton to Port Chicago (BNSF Line)**

#### **General Conditions:**

- Class of tracks – FRA class 5.
- Speed – 79 MPH Passenger / 70 MPH Freight.
- Signal system – Mix of Automatic Block Signal (ABS), CTC and 2 MT CTC.
- General condition of railway – Good 136 pound CWR.
- Number of tracks – Mix of one and two.
- Passing sidings, number and length – 5 sidings, ranging in length from 3,600 to 5,800 feet.

#### **Configuration:**

- General description of surrounding land use –Suburban and rural.
- Width of ROW – 100 feet.
- Approx. length – 43 miles.
- Utilities – Pipelines, fiber optics, others.

#### **Ownership:**

- ROW ownership – BNSF.
- Trackage rights – Limited UP (Not in use at this time).
- Passenger rights – Amtrak, San Joaquin service.

#### **Traffic:**

- Average daily passenger trains – 8.
- Average daily freight trains – 18.
- Switching and yard operations – Stockton, Oakley and Pittsburg.

#### **Capacity Potential:**

- Additional second track.

**Capacity Expansion Challenges:**

- Track runs through San Joaquin River Delta on high fill with several moveable bridges, extensive wetlands impacts from expansion.
- Extensive industry and switching Oakley to Pittsburg.

**6b. Port Chicago to Stege (BNSF Line)**

**General Conditions:**

- Class of tracks – FRA class 3 and 4.
- Speed – 35 to 45.
- Signal system – ABS.
- General condition of railway – 136 pound CWR.
- Number of tracks – One.
- Passing sidings, number and length – 5 sidings. Vary 5,400 feet to 3,400 feet.

**Configuration:**

- General description of surrounding land use – Suburban and rural.
- Width of ROW – 100 feet. .
- Approx. length – 28 miles.
- Utilities.

**Ownership:**

- ROW ownership – BNSF.
- Trackage rights – None.
- Passenger rights – None.

**Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – 4 to 6.
- Switching and yard operations – Richmond.

**Capacity Potential:**

- To be determined.

**Capacity Expansion Challenges:**

- Long viaduct, bridges and tunnels with high fills.

**6c. Port Chicago to Martinez (UP Line)**

**General Conditions:**

- Class of tracks – FRA class 4.
- Speed – 79 MPH passenger / 60 MPH freight.
- Signal system – CTC.
- General condition of railway – 136 pound CWR.
- Number of tracks – One.
- Passing sidings, number and length – None.

**Configuration:**

- General description of surrounding land use –rural and suburban
- Width of ROW – 100 feet. .
- Approx. length – 6 miles.
- Utilities – underground pipelines and fiber optics.

**Ownership:**

- ROW ownership – UP.
- Trackage rights – None.
- Passenger rights – Amtrak, San Joaquin.



**Traffic:**

- Average daily passenger trains – 8.
- Average daily freight trains – 2 to 4.
- Switching and yard operations – Extensive at Martinez.

**Capacity Potential:**

- Second main track possible.

**Capacity Expansion Challenges:**

- Pipelines.
- Wetlands.

## **7. Lathrop to Martinez**

UP MOCOCO line extending from Lathrop to Martinez.



### **7a. Lathrop to Tracy (UP Line)**

#### **General Conditions:**

- Class of tracks – FRA class 2.
- Speed – 10 to 25 MPH.
- Signal system – CTC and Track Warrant Control (TWC).
- General condition of railway – 112 & 113 pound jointed rail.
- Number of tracks – One.
- Passing sidings, number and length – None.

#### **Configuration:**

- General description of surrounding land use – suburban.
- Width of ROW – 100 feet.
- Approx. length – 10 miles.
- Utilities – fiber optics.

#### **Ownership:**

- ROW ownership – UP.
- Trackage rights – None.
- Passenger rights – None.

**Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – 2 to 3.
- Switching and yard operations – Tracy Yard.

**Capacity Potential:**

- Line was two tracks in the past.

**Capacity Expansion Challenges:**

- None.

## **7b. Tracy to Antioch**

**General Conditions:**

- Class of tracks – FRA class 2.
- Speed – 25 MPH.
- Signal system – ABS (out of service).
- General condition of railway – 113 pound jointed rail.
- Number of tracks – One.
- Passing sidings, number and length – None.

**Configuration:**

- General description of surrounding land use – suburban and rural.
- Width of ROW – 100 feet. .
- Approx. length – 30 miles.
- Utilities – pipeline in ROW.

**Ownership:**

- ROW ownership – UP.
- Trackage rights – None.
- Passenger rights – None.

**Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – None.
- Switching and yard operations – Tracy.

**Capacity Potential:**

- Possible two main tracks.

**Capacity Expansion Challenges:**

- UP presently negotiating with BART.
- Some ROW may go to eBART.

## **7c. Antioch to Port Chicago**

**General Conditions:**

- Class of tracks – FRA class 2.
- Speed – 25 MPH.
- Signal system – ABS.
- General condition of railway – 113 pound jointed rail.
- Number of tracks – One.
- Passing sidings, number and length – 2 at 4,000 feet.

**Configuration:**

- General description of surrounding land use – suburban.
- Width of ROW – 100 feet.
- Approx. length – 12 miles.
- Utilities – pipelines.

**Ownership:**

- ROW ownership – UP.
- Trackage rights – None.
- Passenger rights – None.

**Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – 2.
- Switching and yard operations – Antioch and Pittsburg.

**Capacity Potential:**

- Possible 3 or 4 main tracks with new structures.

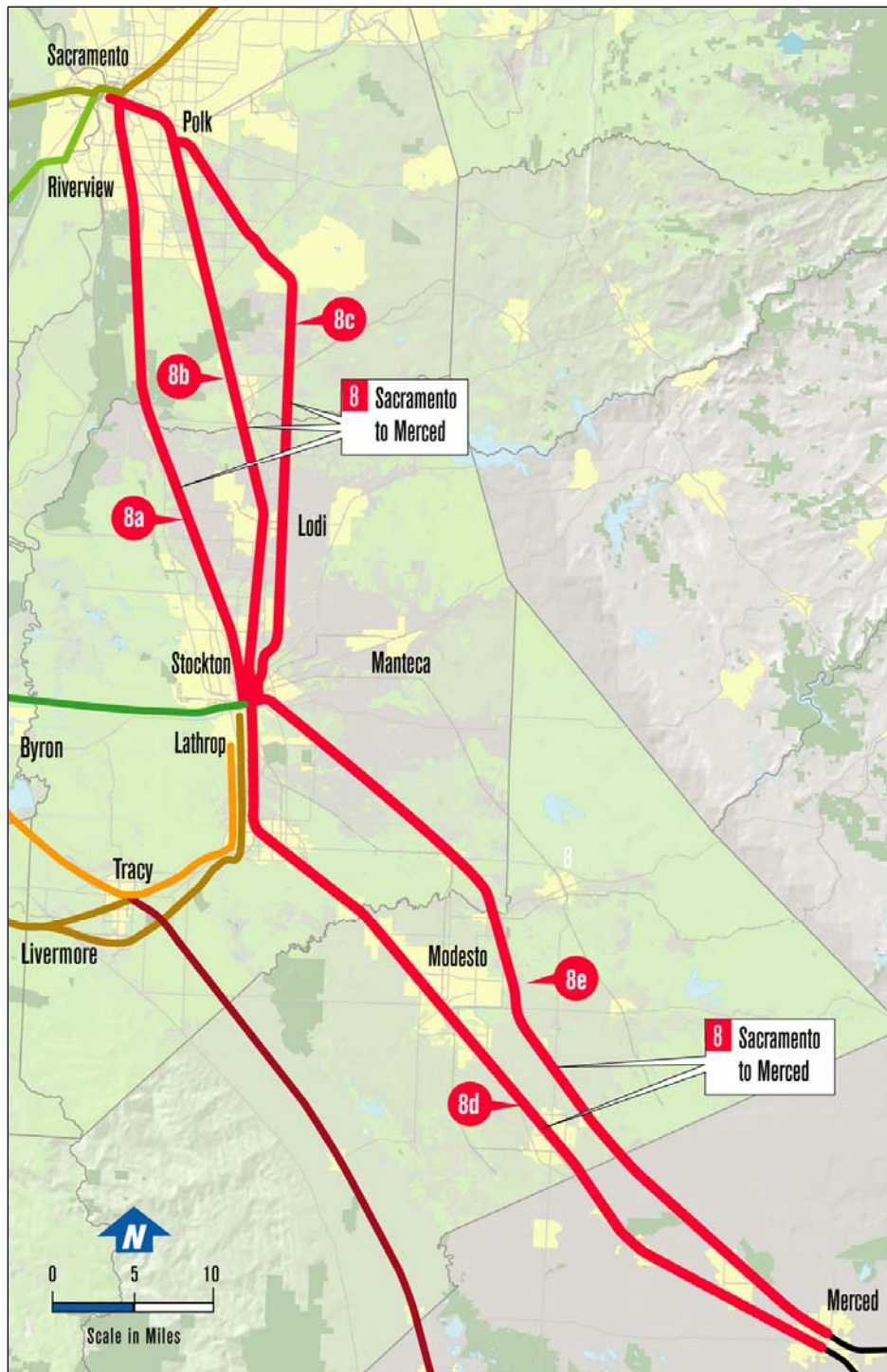
**Capacity Expansion Challenges:**

- ROW restrictions due to yard tracks at Pittsburg
- Narrow underpass structures.



## **8. Sacramento to Merced**

Three (3) segments between Sacramento to Stockton: via UP's Sacramento Subdivision, UP's Fresno Subdivision and the Central California Traction (CCT) line. Two (2) segments between Stockton and Merced: a continuation of UP's Fresno Subdivision, and a portion of BNSF's Stockton Subdivision.



## **8a. Sacramento to Stockton (UP Sacramento Subdivision)**

### **General Conditions:**

- Class of tracks – FRA class 4.
- Speed – 70 MPH.
- Signal system – CTC.
- General condition of railway – 131 pound CWR.
- Number of tracks – One.
- Passing sidings, number and length – 5 sidings. Vary 3,400 feet to 11,000 feet.

### **Configuration:**

- General description of surrounding land use –Suburban and rural.
- Width of ROW – Varies 100 feet to less than 50 feet on south side of Sacramento.
- Approx. length – 48 miles.
- Utilities – fiber optics in ROW.

### **Ownership:**

- ROW ownership – UP.
- Trackage rights – BNSF.
- Passenger rights – None.

### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains:
  - UP: 6 to 8
  - BNSF: 4 to 6
- Switching and yard operations – Stockton and Sacramento.

### **Capacity Potential:**

- Possible 2 main tracks.

### **Capacity Expansion Challenges:**

- Wetlands and crosses numerous bridges over major river channels.
- Multiple road crossings in Sacramento.

## **8b. Sacramento to Stockton (UP Fresno Subdivision)**

### **General Conditions:**

- Class of tracks – FRA class 4.
- Speed – 79 MPH Passenger / 60 MPH Freight.
- Signal system – Mix of CTC and 2 main track CTC.
- General condition of railway – 131-136 pound CWR.
- Number of tracks – One. Some stretches of second main track.
- Passing sidings, number and length – 5 sidings. Vary 6,000 feet to 10,000 feet.

### **Configuration:**

- General description of surrounding land use –Suburban and rural.
- Width of ROW – 100 feet.
- Approx. length – 48 miles.
- Utilities – pipelines and fiber optics in ROW.

### **Ownership:**

- ROW ownership – UP.
- Trackage rights – BNSF.
- Passenger rights – Amtrak, San Joaquin trains.

**Traffic:**

- Average daily passenger trains – 4.
- Average daily freight trains:
  - UP: 6 to 10
  - BNSF: 6 to 8
- Switching and yard operations – Stockton, Lodi and Polk.

**Capacity Potential:**

- Two main tracks.

**Capacity Expansion Challenges:**

Numerous bridges over major river channels.

## **8c. Sacramento (Polk) to Stockton (Central California Traction Route)**

**General Conditions:**

- Class of tracks – FRA class 1 and 2.
- Speed – 10 to 25 MPH.
- Signal system – None.
- General condition of railway – Out of service between Polk and Lodi. Good Condition from Lodi to Stockton.
- Number of tracks – One.
- Passing sidings, number and length – None.

**Configuration:**

- General description of surrounding land use – suburban and rural
- Width of ROW – less than 100 feet.
- Approx. length – 42 miles.
- Utilities – No known longitudinal utilities. Various overhead and underground utility crossings.

**Ownership:**

- ROW ownership – two-thirds UP, one-third BNSF.
- Trackage rights – None.
- Passenger rights – None.

**Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – 2.
- Switching and yard operations – Lodi and Stockton.

**Capacity Potential:**

- Possible two main tracks.

**Capacity Expansion Challenges:**

- Line ends at Polk on north.
- Railroad crossed numerous bridges over major river channels.
- Very restrictive ROW through Stockton with street running rails.

## **8d. Stockton to Merced (UP Fresno Subdivision)**

**General Conditions:**

- Class of tracks – FRA class 4.
- Speed – 60 MPH.
- Signal system – CTC.
- General condition of railway – 131-136 pound CWR.
- Number of tracks – One.
- Passing sidings, number and length – 9 sidings at 8,300 feet.

**Configuration:**

- General description of surrounding land use – urban, suburban and rural.
- Width of ROW – 100 feet.
- Approx. length – 66 miles.
- Utilities – fiber optics and pipelines in ROW.

**Ownership:**

- ROW ownership – UP.
- Trackage rights – BNSF.
- Passenger rights – Altamont Commuter Express (ACE) Stockton to Lathrop only.

**Traffic:**

- Average daily passenger trains – 8.
- Average daily freight trains:
  - UP: 12 to 16
  - BNSF: 4 to 6
- Switching and yard operations – Stockton and Modesto.

**Capacity Potential:**

- Possible 2 main tracks

**Capacity Expansion Challenges:**

- Bridges.
- To build more than two main tracks will require extensive relocation of industry and yard tracks.

## **8e. Stockton to Merced (BNSF)**

**General Conditions:**

- Class of tracks – FRA class 4.
- Speed – 79 MPH passenger / 70 MPH freight.
- Signal system – CTC.
- General condition of railway – 136 pound CWR.
- Number of tracks – Mixed one and two MT.
- Passing sidings, number and length – 8 sidings, vary from 7,200 feet to 10,300 feet.  
Vary from 7,000 feet to 9,000 feet

**Configuration:**

- General description of surrounding land use – urban, suburban and rural.
- Width of ROW – 100 feet.
- Approx. length – 66 miles.
- Utilities – unknown.

**Ownership:**

- ROW ownership – BNSF.
- Trackage rights – None.
- Passenger rights – Amtrak, San Joaquin trains.

**Traffic:**

- Average daily passenger trains – 12.
- Average daily freight trains – 28.
- Switching and yard operations – Stockton, Riverbank and Modesto.

**Capacity Potential:**

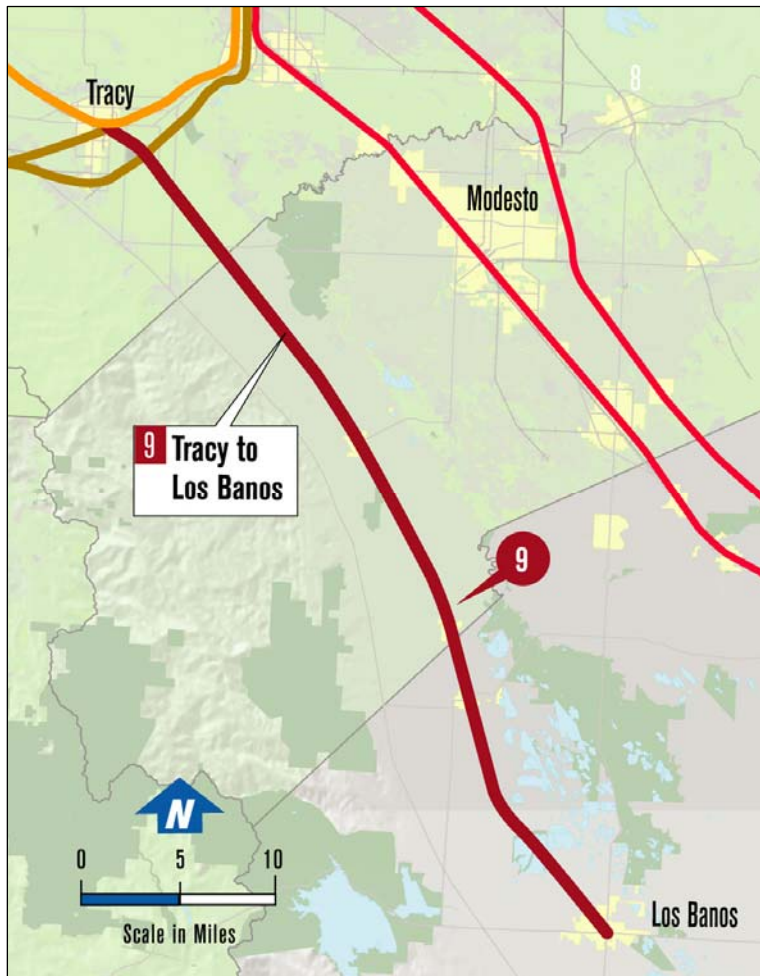
- Possible second main track.

**Capacity Expansion Challenges:**

- In areas of yards in Modesto, Merced, Riverbank and Stockton, yard tracks consume all available ROW.

## **9. Tracy to Los Banos**

UP's Westside line leased to California Northern.



### **General Conditions:**

- Class of tracks – FRA class 1 and 2.
- Speed – 10 to 25 MPH.
- Signal system – None – TWC.
- General condition of railway – Old light jointed rail. Mix of 110 and 113 pounds.
- Number of tracks – One.
- Passing sidings, number and length – 5 sidings. Vary from 2,500 feet to 5,000 feet.

### **Configuration:**

- General description of surrounding land use – suburban and rural.
- Width of ROW – 100 feet.
- Approx. length – 57 miles.
- Utilities – No known longitudinal utilities. Various overhead and underground utility crossings.

### **Ownership:**

- ROW ownership – UP. Leased to California Northern.
- Trackage rights – None.
- Passenger rights – Held by UP.

### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – 2.
- Switching and yard operations – Minimal.

### **Capacity Potential:**

- Possible second main track.

### **Capacity Expansion Challenges:**

- None.



## **10. Niles Jct. to Stockton**

Altamont Commuter Express (ACE) route via UP's Oakland Subdivision and SP's old Lathrop to Niles Jct. route now largely abandoned.



### **10a. Niles Jct. to Stockton - ACE Corridor (UP Oakland Subdivision)**

#### **General Conditions:**

- Class of tracks – FRA class 4.
- Speed – Mix:
  - 79 MPH passenger / 60 MPH freight
  - 60 MPH passenger / 40 MPH freight
  - 40 MPH passenger / 35 MPH freight
- Signal system – CTC.
- General condition of railway – 131 pound CWR.
- Number of tracks – One.
- Passing sidings, number and length – 7 sidings.  
Vary from 4,100 feet to 10,000 feet.

#### **Configuration:**

- General description of surrounding land use – suburban and rural.
- Width of ROW – 100 feet.
- Approx. length – 63 miles.
- Utilities – fiber optics.

#### **Ownership:**

- ROW ownership – UP.
- Trackage rights – None.
- Passenger rights – ACE.

**Traffic:**

- Average daily passenger trains – 8.
- Average daily freight trains – 4 to 8.
- Switching and yard operations – Minimal.

**Capacity Potential:**

- Possible second main track in many locations.

**Capacity Expansion Challenges:**

- Bridges and tunnels.

## **10b. Niles Jct. to Tracy (Old SP Altamont Pass Line)**

**General Conditions:**

- Class of tracks – abandoned, or FRA class 1.
- Speed – 10 MPH.
- Signal system – None.
- General condition of railway – Mostly abandoned, track removed except Nile Jct. to Sunol. Rebuilt SH jointed rail.
- Number of tracks – One.
- Passing sidings, number and length – Minimal.

**Configuration:**

- General description of surrounding land use – suburban and rural.
- Width of ROW – 100 feet.
- Approx. length – 42 miles.
- Utilities – fiber optics cable, various overhead and underground utility crossings.

**Ownership:**

- ROW ownership – Alameda County.
- Trackage rights – Leased to museum operation (Niles Canyon Historical Railway).
- Passenger rights – museum operation.

**Traffic:**

- Average daily passenger trains – 0 to 2 (weekends only).
- Average daily freight trains – None.
- Switching and yard operations – None.

**Capacity Potential:**

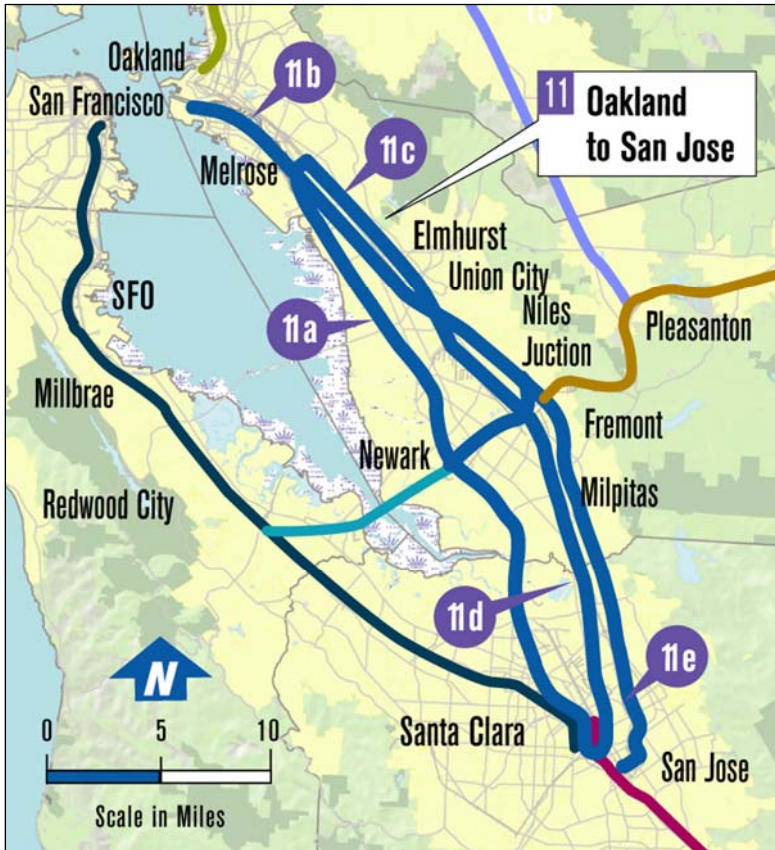
- Limited.

**Capacity Expansion Challenges:**

- Line is mostly abandoned.
- Track in place for switching use only Tracy to Midway.
- Track in place Niles Jct. to Sunol (operates Niles Canyon Historical Railway)

## **11. Oakland to San Jose**

Five overlapping segments many of which can be used in combination. All segments, except one, are fully owned by the UP.



### **11a. UP Coast Subdivision**

Approx. segment length 34 miles.

- i) Elmhurst to Newark
- ii) Newark to Santa Clara
- iii) Santa Clara to Diridon

#### **General Conditions:**

- Class of tracks:
  - i) FRA class 4
  - ii) FRA class 3 and 4
  - iii) FRA class 3
- Speed:
  - i) 70 MPH passenger/  
60 MPH freight
  - ii) MAX 70 MPH  
passenger/ 60 MPH  
freight
  - iii) 40 MPH
- Signal system:
  - i) ABS
  - ii) CTC
  - iii) 3 MT CTC

- General condition of railway:
  - i) 113 pound second hand CWR
  - ii) 136 pound CWR and 113 CWR
  - iii) 136 pound CWR
- Number of tracks:
  - i) single track
  - ii) single track
  - iii) 3 main tracks
- Passing sidings, number and length:
  - i) Yard at Mulford, 3,200 feet at Alvarado Street, 13,600 feet at Newark
  - ii) Yard at Newark, 4,000 feet at Albrae Street, 14,000 feet at Santa Clara
  - iii) Yard at Newhall Street

#### **Configuration:**

- General description of surrounding land use:
  - i) Suburban
  - ii) Rural and industrial
  - iii) Urban
- Width of ROW:
  - i) 100 feet
  - ii) Less than 100 feet
  - iii) Varies

- Utilities:
  - i) None
  - ii) Fiber optics
  - iii) Fiber optics

**Ownership:**

- ROW ownership:
  - i) UP
  - ii) UP
  - iii) Peninsula Corridor Joint Powers Board (PCJPB)
- Trackage rights:
  - i) None
  - ii) None
  - iii) PCJPB
- Passenger rights:
  - i) Amtrak Intercity
  - ii) Amtrak Intercity, Capitol Corridor, ACE
  - iii) Amtrak Intercity, Capitol Corridor, ACE, PCJPB

**Traffic:**

- Average daily passenger trains:
  - i) Amtrak Intercity: 2
  - ii) Amtrak Intercity: 2, Capitol Corridor: 14, ACE: 8
  - iii) Amtrak Intercity: 2, Capitol Corridor: 14, ACE: 8, PCJPB: 96
- Average daily freight trains:
  - i) UP: 4 to 6
  - ii) UP: 4 to 6
  - iii) UP: 10
- Switching and yard operations:
  - i) Mulford
  - ii) Newark
  - iii) San Jose – Newhall Street

**Capacity Potential:**

- i) 2 tracks
- ii) 2 tracks (New trestle structure could accommodate 3-4 tracks through wetlands)
- iii) 4 tracks

**Capacity Expansion Challenges:**

- i) N/A
- ii) Extensive wetlands
- iii) Santa Clara to Diridon will require some expensive property acquisition
- iv) Need several grade-crossing separations

**11b. UP Niles Subdivision**

Approx. segment length 31 miles.

- i) West Oakland to Jack London Square Station
- ii) Jack London Square Station to Elmhurst
- iii) Elmhurst to Niles Jct.
- iv) Niles Jct. to Newark (Centerville Line)

**General Conditions:**

- Class of tracks:
  - i) FRA class 3
  - ii) FRA class 4
  - iii) FRA class 4
  - iv) FRA class 4
- Speed:
  - i) 50 MPH passenger/ 40 MPH freight
  - ii) 79 MPH passenger/ 60 MPH freight
  - iii) 79 MPH passenger / 50 MPH freight
  - iv) 79 MPH passenger / 45 MPH freight (35 & 15 for passenger through Jct. and around wye).
- Signal system:
  - i) 2 MT CTC
  - ii) 2 MT CTC
  - iii) 1 MT CTC
  - iv) 2 MT CTC
- General condition of railway:
  - i) 136 pound CWR
  - ii) 136 and 113 pound CWR
  - iii) 119 pound CWR
  - iv) 119 and 133 pound CWR
- Number of tracks:
  - i) 2 main tracks
  - ii) 2 main tracks
  - iii) 1 main track
  - iv) 2 main tracks
- Passing sidings, number and length:
  - i) Station track at Jack London Square Station
  - ii) Station track at Coliseum Station
  - iii) 1 siding at Hayward – 11,000 feet
  - iv) N/A

**Configuration:**

- General description of surrounding land use:
  - i) Urban
  - ii) Urban
  - iii) Urban
  - iv) Urban
- Width of ROW:
  - i) City street
  - ii) 100 feet
  - iii) 100 feet
  - iv) 100 feet
- Utilities:
  - i) Fiber optics and pipelines
  - ii) Fiber optics and pipelines
  - iii) Fiber optics
  - iv) Fiber optics



**Ownership:**

- ROW ownership:
  - i) City of Oakland Franchise
  - ii) UP
  - iii) UP
  - iv) UP
- Trackage rights:
  - i) BNSF
  - ii) BNSF
  - iii) BNSF
  - iv) None
- Passenger rights:
  - i) Amtrak Intercity, Capitol Corridor, San Joaquin
  - ii) Amtrak Intercity, Capitol Corridor
  - iii) Amtrak Intercity, Capitol Corridor
  - iv) Amtrak Intercity, Capitol Corridor, ACE

**Traffic:**

- Average daily passenger trains:
  - i) Amtrak Intercity: 2, Capitol Corridor: 50, San Joaquin: 16
  - ii) Amtrak Intercity: 2, Capitol Corridor: 24
  - iii) Capitol Corridor: 14
  - iv) Capitol Corridor: 14, ACE: 8
- Average daily freight trains:
  - i) BNSF: 2, UP: 12
  - ii) BNSF: 2, UP: 12
  - iii) BNSF: 2, UP: 2 to 4
  - iv) UP: 4 to 8
- Switching and yard operations:
  - i) Between West Oakland & East Oakland
  - ii) Between East Oakland & Elmhurst
  - iii) Insignificant
  - iv) Insignificant

**Capacity Potential:**

- i) 4 tracks
- ii) 4 tracks
- iii) 3 tracks
- iv) 3 tracks

**Capacity Expansion Challenges:**

- i) Additional track would displace Oakland city street
- ii) N/A
- iii) N/A
- iv) Station configuration at Centerville

**11c. UP Oakland Subdivision**

Approx. segment length 20 miles.

- i) Melrose to Union City
- ii) Union City to Niles Jct.

**General Conditions:**

- Class of tracks:
  - i) Switching drill in use to 98<sup>th</sup> Ave., Oakland. FRA class 1. Main line out of service.
  - ii) N/A
- Speed:
  - i) 10 MPH
  - ii) 60 MPH
- Signal system:
  - i) CTC
  - ii) CTC
- General condition of railway:
  - i) 131 pound CWR
  - ii) 131 pound CWR
- Number of tracks:
  - i) 1 main line and switching drills
  - ii) 1 main line and switching drills
- Passing sidings, number and length:
  - i) 7,000 feet Hayward
  - ii) 4,000 feet Fremont

**Configuration:**

- General description of surrounding land use:
  - i) Urban
  - ii) Suburban
- Width of ROW:
  - i) 50 to 60 feet
  - ii) 100 feet
- Utilities:
  - i) Fiber optics
  - ii) Fiber optics

**Ownership:**

- ROW ownership:
  - i) UP
  - ii) UP
- Trackage rights:
  - i) None
  - ii) None
- Passenger rights:
  - i) None
  - ii) None

**Traffic:**

- Average daily passenger trains:
  - i) None
  - ii) None
- Average daily freight trains:
  - i) None
  - ii) None
- Switching and yard operations:
  - i) Switching along drill to 98<sup>th</sup> Ave, Oakland
  - ii) Switching Fremont and Union City

**Capacity Potential:**

- i) 2 tracks
- ii) 2 tracks

**Capacity Expansion Challenges:**

- i) BART adjoins ROW.

## **11d. Warm Springs Subdivision**

Approx. segment length 18 miles.

- i) Niles Jct. to Milpitas
- ii) Milpitas to San Jose

### **General Conditions:**

- Class of tracks:
  - i) FRA class 1 and 2
  - ii) FRA class 1 and 2
- Speed:
  - i) 10 and 25 MPH
  - ii) 10 and 25 MPH
- Signal system:
  - i) ABS
  - ii) ABS
- General condition of railway:
  - i) Mix of 110, 112, 113, 119 pound jointed rail and 113 pound second hand CWR.
  - ii) Mix of 112, 113 and 136 second hand CWR.
- Number of tracks:
  - i) 1 track
  - ii) 1 track
- Passing sidings, number and length:
  - i) Multiple yard tracks at Warm Springs and Milpitas.
  - ii) None.

### **Configuration:**

- General description of surrounding land use:
  - i) Industrial, Urban and Suburban.
  - ii) Industrial, Urban and Suburban.
- Width of ROW:
  - i) 100 feet
  - ii) Less than 100 feet
- Utilities:
  - i) Fiber optics
  - ii) Fiber optics

### **Ownership:**

- ROW ownership:
  - i) UP
  - ii) UP
- Trackage rights:
  - i) BNSF
  - ii) None
- Passenger rights:
  - i) None
  - ii) None

### **Traffic:**

- Average daily passenger trains:
  - i) None
  - ii) None
- Average daily freight trains:
  - i) BNSF: 2, UP: 2 to 4.
  - ii) UP: 2 to 4.

- Switching and yard operations:
  - i) Extensive switching and yard operations Warm Springs, Milpitas.
  - ii) Extensive switching on industrial drill tracks on north side of San Jose.

**Capacity Potential:**

- i) 2 main tracks
- ii) 2 main tracks

**Capacity Expansion Challenges:**

- i) No room for second main tracks in vicinity of Warm Springs yard.
- ii) Narrow ROW. Numerous complex street intersections.

## **11e. UP San Jose Branch**

Approx. length 19 miles.

- i) Niles Jct. to Paseo Padre Blvd.
- ii) Paseo Padre Blvd. to San Jose

**General Conditions:**

- Class of tracks:
  - i) Abandoned
  - ii) Out of service to Milpitas, FRA class 1 from Milpitas to San Jose.
- Speed:
  - i) N/A
  - ii) 10 MPH
- Signal system:
  - i) Out of service (CTC)
  - ii) Out of service, yard limits south of Milpitas.
- General condition of railway:
  - i) Abandoned
  - ii) Out of service – jointed rail south of Milpitas.
- Number of tracks:
  - i) 1 track
  - ii) 1 track
- Passing sidings, number and length:
  - i) None
  - ii) Milpitas yard – 10,000 feet.

**Configuration:**

- General description of surrounding land use:
  - i) Suburban
  - ii) Suburban
- Width of ROW:
  - i) 60 feet
  - ii) 60 feet
- Utilities:
  - i) Fiber optics
  - ii) Fiber optics

**Ownership:**

- ROW ownership:
  - i) UP
  - ii) Paseo Padre Blvd to Williams Street sold to Santa Clara VTA.
- Trackage rights:
  - i) None.
  - ii) UP retained trackage rights at Milpitas.
- Passenger rights:
  - i) Sold to VTA
  - ii) Sold to VTA

**Traffic:**

- Average daily passenger trains:
  - i) None
  - ii) None
- Average daily freight trains:
  - i) None
  - ii) None
- Switching and yard operations:
  - i) None
  - ii) In vicinity of Warm Springs and Milpitas

**Capacity Potential:**

- i) 2 tracks – planned as BART corridor

**Capacity Expansion Challenges:**

- i) Narrow ROW



## **12. San Francisco to San Jose**

The Caltrain Corridor.



### **General Conditions:**

- Class of tracks – FRA class 4.
- Speed – 70 MPH passenger / 60 MPH freight.
- Signal system – 2 MT CTC and DT ABS.
- General condition of railway – 136 pound CWR.
- Number of tracks –
  - San Francisco to Santa Clara: 2 main tracks.
  - Santa Clara to Diridon: 3 main tracks.
- Passing sidings, number and length – South San Francisco, Newhall Street yard and San Jose.

### **Configuration:**

- General description of surrounding land use – urban, suburban and rural.
- Width of ROW – 100 feet.
- Approx. length – 47 miles.
- Utilities – fiber optics, pipeline.

### **Ownership:**

- ROW ownership – PCJPB.
- Trackage rights – UP.
- Passenger rights – UP retains Amtrak intercity rights.

### **Traffic:**

- Average daily passenger trains – 96 weekdays.
- Average daily freight trains – 4.
- Switching and yard operations – San Jose, Newhall yard, Redwood City and South San Francisco.

### **Capacity Potential:**

- Three to four main tracks.

### **Capacity Expansion Challenges:**

- Station platforms, tunnels.

### **13. Redwood Jct. to Newark**

Old SP Dumbarton line now owned by the PCJPB.



#### **General Conditions:**

- Class of tracks – FRA class 1.
- Speed – 10 MPH.
- Signal system – ABS (out of service).
- General condition of railway – Old jointed rail. Minimal maintenance.
- Number of tracks – One.
- Passing sidings, number and length – Switching drill.

#### **Configuration:**

- General description of surrounding land use – suburban/San Francisco Bay/Wetlands.
- Width of ROW – 100 feet.
- Approx. length – 11 miles.
- Utilities – Unknown.

#### **Ownership:**

- ROW ownership – PCJPB.
- Trackage rights – UP.
- Passenger rights – PCJPB.

#### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – None.
- Switching and yard operations – Redwood Jct. to Belhaven and Newark .

#### **Capacity Potential:**

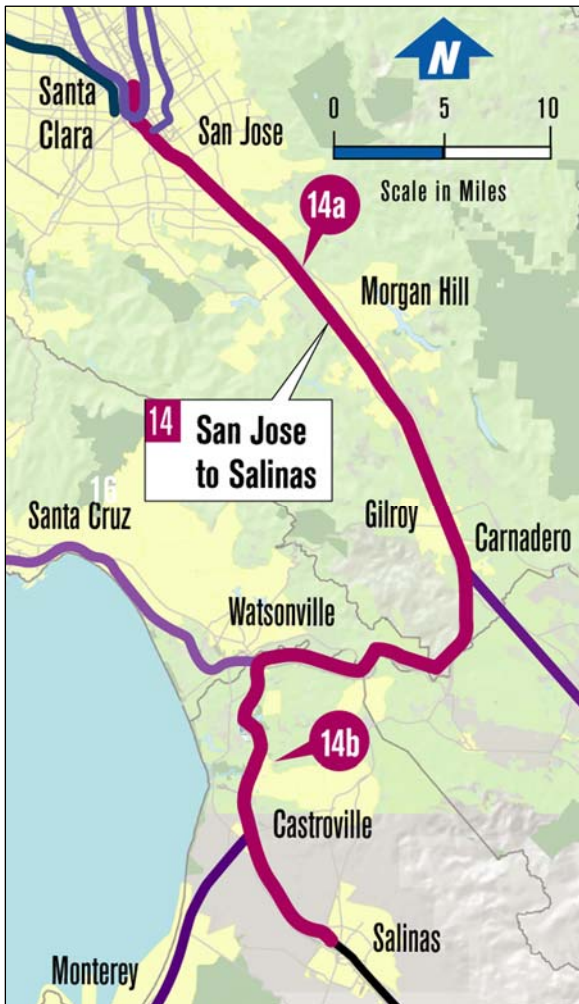
- Possible two main tracks.

#### **Capacity Expansion Challenges:**

- Railroad bridge needs complete rebuilding.
- Track passes through San Francisco Bay National Wild Life Refuge.

## **14. San Jose to Salinas**

Southern portion of UP's Coast Subdivision.



### **14a. San Jose to Gilroy (UP Coast Subdivision)**

#### **General Conditions:**

- Class of tracks – FRA class 4.
- Speed –
  - 79 MPH passenger / 60 MPH freight
  - 50 MPH passenger / 40 MPH freight
- Signal system – DT-ABS, CTC, two main track CTC.
- General condition of railway – 136 pound CWR.
- Number of tracks – One. Some second main track.
- Passing sidings, number and length – 1 siding at 10,000 feet.

#### **Configuration:**

- General description of surrounding land use – suburban and rural.
- Width of ROW – 100 feet.
- Approx. length – 30 miles.
- Utilities – fiber optics.

#### **Ownership:**

- ROW ownership – UP.
- Trackage rights – None.
- Passenger rights – Amtrak, PCJPB- San Jose to Gilroy.

#### **Traffic:**

- Average daily passenger trains – 10 San Jose to Gilroy
- Average daily freight trains – 4 to 6.

#### **Capacity Potential:**

- Possible two main tracks.

#### **Capacity Expansion Challenges:**

- Adjacent highway and residential areas.

## **14b. Gilroy to Salinas**

### **General Conditions:**

- Class of tracks – FRA class 3 and 4.
- Speed – Mix.
  - Top speed: 60 MPH Passenger / 40 MPH Freight
- Signal system – Mix: DT, CTC and ABS.
- General condition of railway – 132 to 136 pound CWR.
- Number of tracks – One, sometimes two.
- Passing sidings, number and length – 2 sidings at 6,000 feet.

### **Configuration:**

- General description of surrounding land use – suburban and rural.
- Width of ROW – 100 feet.
- Approx. length – 38 miles.
- Utilities – fiber optics.

### **Ownership:**

- ROW ownership – UP.
- Trackage rights – None.
- Passenger rights – Amtrak.

### **Traffic:**

- Average daily passenger trains – 2.
- Average daily freight trains – 4 to 6.
- Switching and yard operations – Logan, Watsonville and Salinas.

### **Capacity Potential:**

- Possible two main tracks.

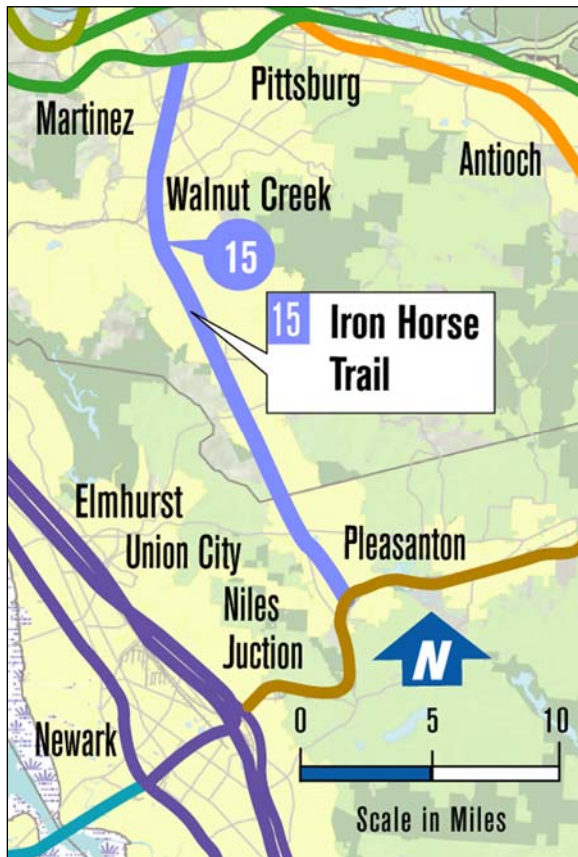
### **Capacity Expansion Challenges:**

- Wetlands in Elkhorn Slough.



## **15. Iron Horse Trail**

ROW of the old SP San Ramon Branch.



### **General Conditions:**

- Class of tracks – No track in place. Railroad abandoned.
- Speed – N/A.
- Signal system – N/A.
- General condition of railway – Railroad abandoned.
- Number of tracks – N/A.
- Passing sidings, number and length – N/A.

### **Configuration:**

- General description of surrounding land use – suburban.
- Width of ROW – less than 100 feet.
- Approx. length – 30 miles.
- Utilities – Unknown.

### **Ownership:**

- ROW ownership – Alameda and Contra Costa Counties.
- Trackage rights – N/A.
- Passenger rights – N/A

### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – None.
- Switching and yard operations – None.

### **Capacity Potential:**

- None.

### **Capacity Expansion Challenges:**

- Neighborhood opposition.



## **16. Santa Cruz to Watsonville Jct.**

UP's Santa Cruz Branch.



### **General Conditions:**

- Class of tracks – FRA class 1.
- Speed – 10 MPH.
- Signal system – None.
- General condition of railway –
  - Light density branch line.
  - 75 pound jointed rail.
- Number of tracks – One.
- Passing sidings, number and length – None.

### **Configuration:**

- General description of surrounding land use – suburban and rural.
- Width of ROW – varies 100' maximum.
- Approx. length – 21 miles.
- Utilities – No known longitudinal utilities. Various overhead and underground utility crossings.

### **Ownership:**

- ROW ownership – UP.
- Trackage rights – None.
- Passenger rights – None (except Santa Cruz and Big Trees Railroad in Santa Cruz).

### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – 2.
- Switching and yard operations – Watsonville and Davenport.

### **Capacity Potential:**

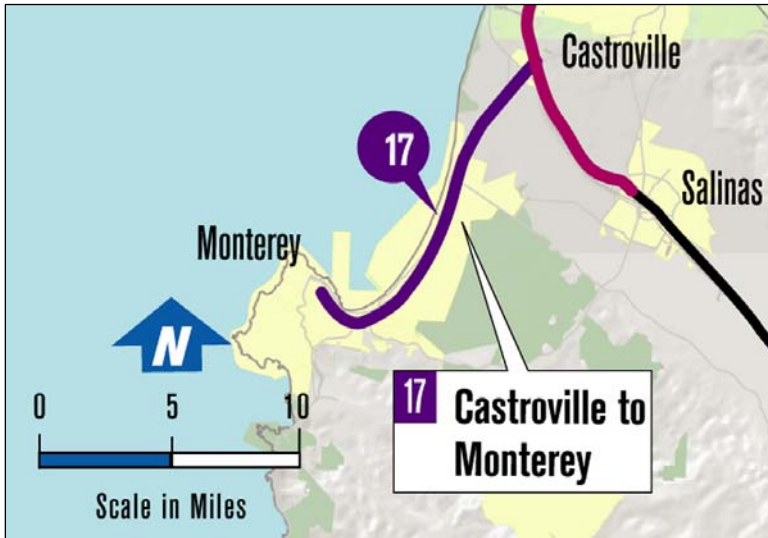
- Single track with passing sidings.

### **Capacity Expansion Challenges:**

- Narrow ROW – many trestles – street running through Santa Cruz.

## **17. Castroville to Monterey**

Old UP Monterey Branch now abandoned. Owned by Transportation Agency for Monterey County (TAMC).



### **General Conditions:**

- Class of tracks – FRA excepted. Line out of service. Mostly 90 pound jointed rail.
- Speed – 0.
- Signal system – None.
- General condition of railway – Old Jointed rail. Poor tie condition.
- Number of tracks – One
- Passing sidings, number and length – None.

### **Configuration:**

- General description of surrounding land use – rural and suburban.
- Width of ROW – 100 feet.
- Approx. length – 13 miles.
- Utilities – No known longitudinal utilities. Various overhead and underground utility crossings.

### **Ownership:**

- ROW ownership – TAMC.
- Trackage rights – None.
- Passenger rights – None.

### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – UP has no common carrier obligation.
- Switching and yard operations – None.

### **Capacity Potential:**

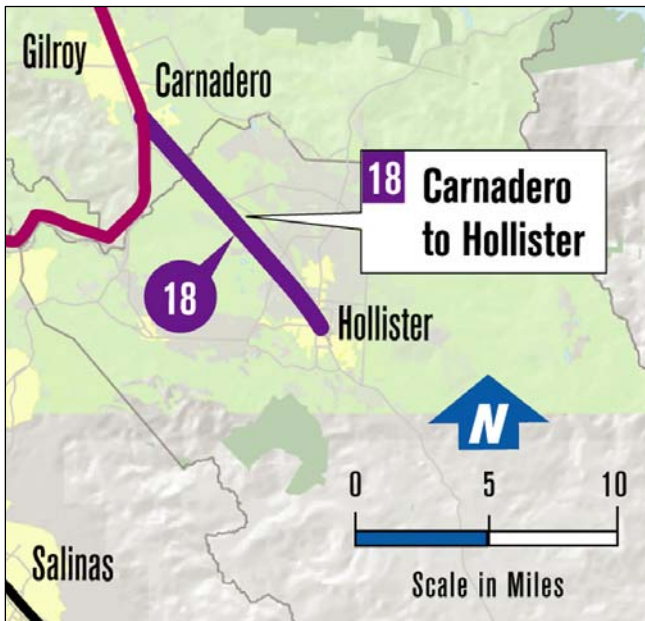
- 2 main tracks.

### **Capacity Expansion Challenges:**

- Bridge over Salinas River.

## **18. Carnadero to Hollister**

UP's Hollister Branch.



### **General Conditions:**

- Class of tracks – FRA class 1.
- Speed – 10 MPH.
- Signal system – None.
- General condition of railway – Minimal maintenance light density branch line. 80 pound jointed rail.
- Number of tracks – One.
- Passing sidings, number and length – Minimal.

### **Configuration:**

- General description of surrounding land use – rural.
- Width of ROW – 100 feet.
- Approx. length – 13 miles.
- Utilities – No known longitudinal utilities. Various overhead and underground utility crossings.

### **Ownership:**

- ROW ownership – UP.
- Trackage rights – None.
- Passenger rights – None.

### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – Less than one.
- Switching and yard operations – Hollister.

### **Capacity Potential:**

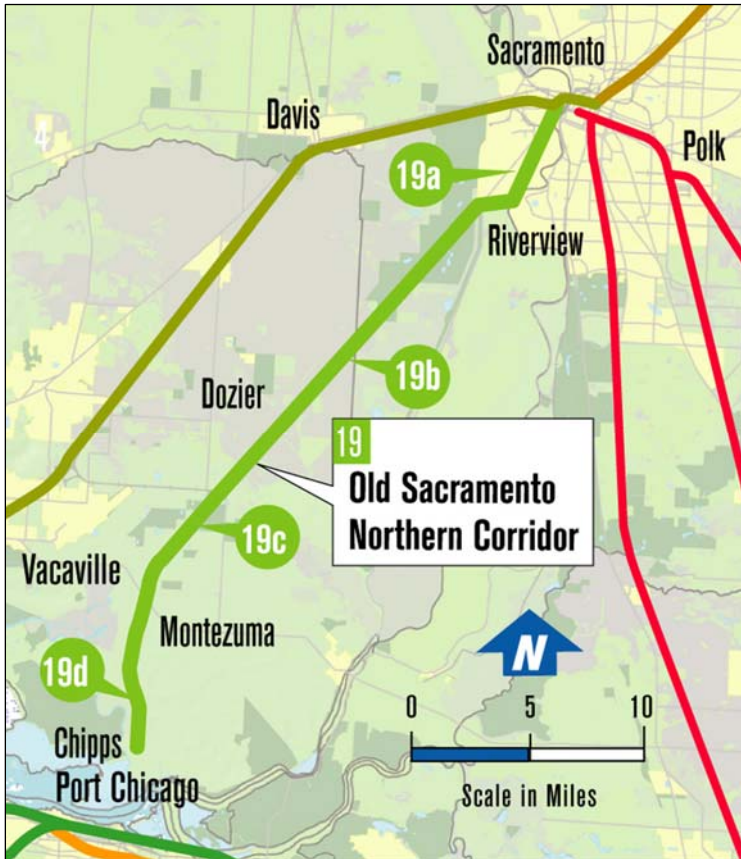
- Possible two main tracks.

### **Capacity Expansion Challenges:**

- None.

## **19. Old Sacramento Northern Corridor**

A portion of the old Sacramento Northern's Route between West Sacramento and Pittsburg. Now partially abandoned.



### **19a. West Sacramento to Riverview**

#### **General Conditions:**

- Class of tracks – FRA class 1.
- Speed – 10 MPH.
- Signal system – None. Yard Limits.
- General condition of railway – Old jointed rail. Less than 90 pounds.
- Number of tracks – One.
- Passing sidings, number and length – None.

#### **Configuration:**

- General description of surrounding land use – Rural.
- Width of ROW – Less than 100 feet.
- Approx. length – 4 miles.
- Utilities – Unknown.

#### **Ownership:**

- ROW ownership – Yolo short line.
- Trackage rights – None.
- Passenger rights – Yolo short line.

#### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – Less than one.
- Switching and yard operations – In port of Sacramento.

#### **Capacity Potential:**

- Unknown.

#### **Capacity Expansion Challenges:**

- Unknown.

### **19b. Riverview to Dozier**

#### **General Conditions:**

- Class of tracks – None.
- Speed – N/A.
- Signal system – None.
- General condition of railway – Abandoned ROW.
- Number of tracks – None.
- Passing sidings, number and length – None.

**Configuration:**

- General description of surrounding land use – Rural.
- Width of ROW – Less than 100 feet.
- Approx. length – 17miles.
- Utilities – pipelines.

**Ownership:**

- ROW ownership – Unknown.
- Trackage rights – None.
- Passenger rights – None.

**Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – None.
- Switching and yard operations – None.

**Capacity Potential:**

- Unknown.

**Capacity Expansion Challenges:**

- Unknown.

## **19c. Dozier to Montezuma**

**General Conditions:**

- Class of tracks – FRA class 1.
- Speed – 10 MPH.
- Signal system – None. Yard limits.
- General condition of railway – Old light jointed rail. Less than 90 pounds
- Number of tracks – One
- Passing sidings, number and length – 2 at 600 feet.

**Configuration:**

- General description of surrounding land use – rural.
- Width of ROW – Less than 100 feet.
- Approx. length – 26miles.
- Utilities – Unknown.

**Ownership:**

- ROW ownership – Western Railway Museum.
- Trackage rights – None.
- Passenger rights – Museum excursion operation.

**Traffic:**

- Average daily passenger trains – Varies.
- Average daily freight trains – None.
- Switching and yard operations – None.

**Capacity Potential:**

- Unknown.

**Capacity Expansion Challenges:**

- Unknown.



## **19d. Montezuma to Chipps**

### **General Conditions:**

- Class of tracks – None.
- Speed – N/A.
- Signal system – None
- General condition of railway – Abandoned ROW.
- Number of tracks – None.
- Passing sidings, number and length – None.

### **Configuration:**

- General description of surrounding land use – rural.
- Width of ROW – Less than 100 feet.
- Approx. length – 3 miles.
- Utilities – Unknown.

### **Ownership:**

- ROW ownership – Unknown.
- Trackage rights – None.
- Passenger rights – None.

### **Traffic:**

- Average daily passenger trains – None.
- Average daily freight trains – None.
- Switching and yard operations – None.

### **Capacity Potential:**

- Unknown.

### **Capacity Expansion Challenges:**

- Non-continuous ROW – Sacramento ship channel crossing. San Joaquin River Delta crossing.